

## ABSTRACT

The image output system of the invention collects a preset number of adjacent pixels to one pixel group to divide a number of pixels constituting an image into multiple pixel groups and specifies a pixel group tone value as a representative tone value of each pixel group. The image output system refers to a conversion table to generate dot number data of each pixel group. The conversion table stores dot number data, which represents number of dots to be created in one pixel group, in relation to a combination of a pixel group classification number allocated to each pixel group and the specified pixel group tone value of the pixel group. The image output system then refers to a priority order of pixels representing potentials of dot creation in respective pixels of one pixel group, determines the positions of dot-on pixels in each pixel group according to the generated dot number data of the pixel group, and actually creates dots according to the determined positions of the dot-on pixels. The dot number data does not include information on the positions of the dot-on pixels and has a small data volume, thus enabling high-speed data transfer. The dot number data is readily obtained by simply referring to the conversion table. This leads to high-speed output of high-quality image data. The technique of the invention thus enables easy and high-speed output of a high-quality image.